

it is an open book to all, those who feel interest may peruse, those who can discriminate always find the bookmark in place. For a large page and bold type try *ptersii*—from Ottawa to Washington, the central plains to the seaboard—that yellow, sickly, brake frond on any hillside, a conspicuous feature of the landscape when attention is called to it; date July 15th.

How clearly the light has shone over Harris's species *leucostigma* by reason of the food-plant being mentioned. His name fell through pre-occupancy in the European fauna, but we could never have known what species he meant from even the good description, had that been all. Grote, at various times, placed it in the synonymy of three different species and redescribed it under a fourth. That *purpurifascia*, the universal Columbine feeder, was Harris's species we know beyond question, since that good man mentioned that its larva had feasted on the roots of a fine double Columbine in his garden. His description of one hundred and twenty words might have been cut in twain; his type—it has probably gone where all good types will ultimately go. Life-histories were generally unknown in Grote's time, and though now slowly giving up their secrets, there is great need for co-operation, especially from the West.

NEW TROPICAL AMERICAN HESPERIDÆ.

BY GEO. A. EHRLMANN, PITTSBURGH, PENNA.

Leucochitonea Jason, n. sp.—This species is very closely allied to *L. locutia* of Hew., but it is not so robust in build. The colour of the head, thorax and abdomen is paler. Ground colour of the upper side of both pair of wings has a tendency to being semitransparent; basal area is not so dark. Outer margin is lightly shaded with pale brown; in this shaded space on the hind wings is a marginal row of whitish lunate spots. Fringes on the hind wings are white, on the fore wings black.

Under side: palpi, legs and abdomen white; thorax dark brown. The markings on the under side of all the wings are the same as above, but much paler. I find no special distinction in the markings in the sexes for separate description.

Exp. 2 inches. Types in cabinet of Ehrmann. Hab.: Suapure, Venezuela.

September, 1907

Leucochitonea Janice, n. sp.—Male: upper side, head, palpi and antennæ black; thorax black with a coat of long whitish hair-like scales. The abdomen is white with a brownish cast. Fore wings pure white, costal margin black, the apical and other margins are black; in the apical area there is a white dash running from costa to outer margin; fringes black. Hind wings pure white with a narrow black thread-like margin; fringes white.

Under side: thorax black, with a conspicuous white spot at the base of the fore wings, and a smaller reddish spot at the base of the hind wings. The abdomen is pure white, with two black lateral bars running its full length. Legs black. The fore wings are the same as above, but much lighter. Hind wings white, with a slight cast of brown scales. All the nervures are dark brown.

Exp. $1\frac{7}{8}$ inches. Type in cabinet of Ehrmann. Habitat: Suapure, Venezuela. Note—The species that is most closely allied to *L. Janice* is *L. pastor* of Feld. from Mexico.

Leucochitonea Euphémie, n. sp.—Allied to *L. canescens* of Felder from Mexico; the thorax is more robust; the abdomen is more decidedly annulated with lighter gray and the antennæ are heavier and longer. Fore wings on the upper side: The subapical and median row of spots are more decidedly outlined and not so large and confluent as in *L. canescens*. Hind wings on the upper side: The discoidal space is more broken into smaller and irregular shaped spots; there is also a row of six small pin-point spots on the outer margin. Fringes are heavier and paler. The under side of fore wings is the same as above, but lighter.

Hind wings on the under side are pure white, with a narrow disrupted black border. Under side: palpi, thorax, legs and abdomen pure white.

Exp. $1\frac{5}{8}$ inches. Types in cabinet of Ehrmann. Hab.: Suapure, Venezuela.

Pamphila Antenora, n. sp.—Upper side: antennæ and palpi dark brown; head dark brown, with two rows of three small white spots; thorax and abdomen dark brown. Upper side of fore wings, ground colour dark brown; at the extreme end of the discoidal there is a kidney-shaped transparent spot one-sixteenth of an inch in size; in the limbal inner space near the lower median nervure there is a square elongate transparent spot; above this on the median nervure there is another spot that is transparent and triangular in shape, pointing outwardly, and above this

in the next cell is another small square spot which is moved a little nearer the outer margin ; in the apical inner space there are two small pin-point spots.

Hind wings : on the upper side the ground color is a shade lighter than on the fore wings, and on the inner space beginning at the apex and ending at the abdominal margin it is still another shade lighter ; on the subapical space there is a well-defined grayish line about one-eighth of an inch long. Fringes brown, but lighter than the ground colour of both pairs of wings.

Under side : palpi, thorax and abdomen white ; legs pale brown. On the fore wings the ground colour is the same as above, but a shade lighter. The apical area is suffused with a violaceous tint. All other markings are the same as above. On the hind wings the ground colour is white, with a pinkish cast ; the nervures are pinkish brown.

Exp. male 1 9/16 inches. Type in cabinet of Ehrmann. Hab.: Suapure, Venezuela.

Pamphila Elenora, n. sp.—Upper side is dark brown, almost black. Fore wings have two small transparent marks in the limbal area ; in the subapical space there are two very faint spots. Hind wings have a slightly lighter shading across the fascia. Fringes are scanty and black.

Under side : palpi, thorax and abdomen chocolate brown ; the abdomen has two faint buff-coloured lateral bars. Legs light chestnut brown. On the fore wings the ground colour is the same as above, only a trifle lighter ; there is a dash of yellow on the costa above the outer end of the discoidal cell. On the hind wings the ground colour is of a rich cinnamon brown ; there is a narrow buff bar beginning on the costa near the apex and extending across the fascia to the submedian nervure.

Exp. 1 7/16 inches. Collected by E. A. Klages. Type in cabinet of Ehrmann. Hab.: Suapure, Venezuela.

Pamphila Theodora, n. sp.—Upper side : antennæ, head, thorax and abdomen brown. Both on the lower and upper side of the base of the antennæ on the head there is a conspicuous white spot ; between the eyes is a sharp, well-defined white streak ; the neck is of a buff colour.

Upper side of the fore wings : ground colour rich chestnut brown ; there are two transparent spots in the lower area of the discoidal cell ; the upper is triangular and the lower is quadrate in shape. The subapical area has a row of six elongate yellowish spots on the inner margin ; from the base to the median area is a light brownish shade, above this is a well-defined golden-yellow spot.

Upper side of the hind wings: ground colour is a shade lighter than on the fore wings; running through the fascia from the apex to the abdominal margin is a row of seven golden elongated spots. Fringes light yellow.

Under side: palpi pale buff, thorax dark brown, abdomen dark brown, with two white lateral bars. The legs are chocolate brown. On the fore wings the ground colour is the same as above; costa light chestnut brown, tip of apex chestnut brown, the subapical spots that are on the upper side are reproduced on the under side by a broad white bar shaded at both ends with chestnut brown. The two transparent spots that are above are suffused into one irregular spot, and beneath this near the inner margin is a dirty whitish block. On the hind wings the ground colour is of a deep rich chocolate brown; there is a large pure white bar on the subcostal space; beginning at the base and ending at the apex there is a black dash in the discoidal cell; then there is another larger white bar beginning below the apex and extending across the fascia to the abdominal margin, and from the middle of the outer margin to the anal angle it is shaded with pale buff.

Exp. $1 \frac{4}{5}$ inches. Type in cabinet of Ehrmann. Hab.: Suapure, Venezuela.

Thymele terracina, n. sp. — Female. — Upper side: the antennæ, palpi, head and abdomen are very dark brown. The thorax is dark brown, but clothed with a coat of long sage-green scales. On the fore wings the ground colour is dark brown; basal area dusted lightly with sage-green, at the outer end of the discoidal cell there is a large U-shaped transparent spot; above this spot on the costa there are two narrow elongated spots of the same colour. Below the discoidal cell in the limbal area there is almost a straight bar of three unequal-sized lunate transparent spots; on the apical inner space there is a curved line of six transparent spots, beginning on the costa and ending on the upper median vein. Fringes brown. On the hind wings the ground colour is dark brown; the basal area is heavily dusted with rich sage-green. Fringes pure white; from the apex of the anal angle to the base the fringes are brown.

Under side: palpi ashen gray, legs light brown; thorax and abdomen dark brown, thorax clothed with long blackish-brown hair-like scales. The fore wings are of a light chestnut brown, uniform throughout, transparent spots same as above. On the hind wings the ground colour is very

dark brown, costa a shade lighter, apex ashen-gray, between the median and the lower submedian vein there is a slight scattering of white scales. Tails $\frac{1}{2}$ inch in length.

Exp. $2\frac{5}{8}$ inches. Type in cabinet of Ehrmann. Hab.: Remedios, U. S. Columbia, S. A.

Thymele viterboana, n. sp.—Upper side : antennæ brown; head, thorax and abdomen olive-green. On the fore wings the ground colour is of a rich chestnut-brown, but grows a little lighter toward the base. The basal area is slightly sprinkled with bluish-green scales. The transparent spots are situated in a similar position to those in *T. harpagus*, Felder, but not so conspicuous. The fringes are brown. On the hind wings the ground colour is much darker than it is on the fore wings, the costa is lighter. The median space, beginning at the base of the wing and shading towards the tails, is a beautiful olive-green. Fringes brown, but dentated with white on the outer margin.

Under side : palpi buff; thorax, legs and abdomen dark brown. On the fore wings the ground colour is much lighter than it is above, but with a darker shade on the outer marginal space, the spots are all the same as above. On the hind wings the ground colour is dark brown, basal and costal area lighter, then running across the fascia and outer margin there are two lighter brown bars.

Tails, $\frac{3}{16}$ of an inch in length. Expanse of fore wings, $2\frac{1}{4}$ inches.

Hab.—Sacorro, U. S. Columbia, S. A. Type in cabinet of Ehrmann.

Thymele Guatemalaina, n. sp.—Male. Closely allied to the female of *T. proteus*, Linn., on the upper surface. The ground colour and spots are very similar, but the spots are not so distinctly separated. The basal area has a tendency to be lighter.

Under side : palpi fulvous; thorax and legs brown; abdomen ashen-gray. Fore wings light brown, inner margin still lighter; spots same as above. On the hind wings the ground colour is dark chestnut-brown; there is a narrow buff bar, $\frac{1}{32}$ of an inch wide, that begins on the costa near the apex, and extends to the lower median vein. All fringes are a shade lighter brown than the ground colour. Tails, $\frac{1}{4}$ of an inch long.

Expanse, 2 inches. Type in cabinet of Ehrmann. Hab.: Cajabon, Guatemala, Cen. Amer.

Thymele Thiemei, n. sp.—Upper side : antennæ, head, thorax and abdomen dusky brown. On both pair of wings the ground colour is dusky brown; tails dark, almost black brown; there is a very faint bar on the fascia of the fore wings. Fringes on all the wings light brown; on the tails black.

Under side : palpi, head, thorax, legs and abdomen light brown. On the fore wings the ground colour is light brown ; the fascial bar that is mentioned above is here very prominent ; the apical area has a large dark brown triangular spot. On the hind wings the ground colour is the same as on the fore wings ; the markings are the same as in *T. eurycles*, Lat., of Brazil. Fringes on both pairs of wings are a shade lighter than the ground colour. Tails, $\frac{3}{4}$ inch in length. Expanse, $1\frac{7}{8}$ inch. Hab.: San Pedro Sula, Honduras, Central America.

This species seems to be very rare, for of the many hundreds of specimens that I have obtained from Dr. C. Thieme, of Honduras, it remains unique in my collection.

Thymele Borja, n. sp.—Upper side : antennæ, head, thorax and abdomen are very dark brown. On both pairs of wings the ground colour is of a beautiful fawn-brown ; margins edged with dark brown ; fringes a shade lighter than the ground colour.

Under side : palpi light brown ; antennæ, thorax, legs and abdomen dark brown. Fore wings lighter than above ; transparent spots the same as above ; there are two dark wavy brown lines on the fascia. On the hind wings the ground colour has the same shade of brown as the fore wings ; on the costa near the base there is a quadrate spot ; aside from this there are two dark brown bars on the fascia. Tails, $\frac{7}{16}$ inch long. Expanse, 2 inches. Hab.: Barja, Bolivia, S. America.

Goniurus Triptolemus, n. sp.—Female. Upper side : antennæ, head, thorax and abdomen dark brown. On the fore wings the ground colour is also dark brown ; on the fascia there is a narrow transparent bar, which is composed of four unequal spots ; the third spot from the costa is the largest. In the median cell beyond this bar is a narrow transparent spot which crosses the cell ; on the subapical space is a row of four very minute transparent spots ; fringes brown. On the hind wings the ground colour is dark brown, but a shade lighter than the fore wings. The tails are white ; the vein that extends through them is sprinkled with brown. Apical fringes are white, but slightly intermixed with brown. Fringes on the outer margin and on the tails are very long and pure white. Abdominal fringes are shorter and brown.

Under side : the thorax and abdomen are much lighter than above ; the abdomen has a dark brown bar ; underneath the legs are also dark brown. On the fore wings the ground colour is lighter than above ; all the same markings, but the transparent bar is more sharply defined ; the inner margin is pale brown, and dusted with white. On the hind wings the ground colour is the same as the fore wings ; there is a faint dark

brown shading of three bars on the fascia ; outer margin from the apex to the tails is pure white ; tails are brown, heavily fringed with white. Tails, $\frac{3}{16}$ inch long. Expanse, $2\frac{1}{8}$ inches. Hab.: Bagasas, Costa Rica, Ct. America. Type Ehrmann collection.

Goniurus Cleopatra, n. sp.—Female. Upper side : antennæ, head, thorax and abdomen are dark brown. On the fore wings the ground colour is dark brown ; the costa near the base to the transparent bar that extends across the fascia is white ; the bar that is on the fascia and the spots on the subapical space are the same as in *G. Triptolemus*; from the median cell the outer margin and tails are white; fringes white. On the abdominal margin the fringes are scanty and brown. On the hind wings the ground colour is dark brown ; the abdominal margin is dusted with white from the median vein, including the tails. Fringes on the apical and abdominal margin are dark brown.

Under side : palpi are white, dusted with brown; thorax and abdomen lighter than above ; there is a faint indication of two white lateral bars on the lower side of the abdomen ; legs dark brown. On the fore wings the ground colour is much lighter than the upper side ; the transparent bars and spots are the same ; the inner marginal area is white. On the hind wings the ground colour is very dark brown, slightly dusted with a lighter shade; outer margin, including the tails, is pure white excepting four faint lunate spots on the apical area. Tails, $\frac{1}{16}$ inch long. Expanse, $1\frac{5}{8}$ inch. Hab.: Suapure, Venezuela. Type in collection of Ehrmann. This species bears considerable resemblance to *G. Orion*, Cram., from the upper Cauca valley of Colombia, S. A., and was represented in the E. A. Klages catch by one fine example, excepting that one hind wing is missing; otherwise the specimen is perfect and fresh.

Eumesia Potomoni, n. sp.—Female. Upper side : antennæ black ; head, thorax and abdomen dark velvety-brown. On the fore wings the ground colour is a bronzy-brown. Base and margin slightly darker, and at the end of the discoidal cell there is a black dot. On the subapical space near the costa there are two minute transparent spots ; then below these dots there is a dark curved line ; this line ends in the lower sub-median cell. The fringes are black. On the hind wings the ground colour is the same as that of the fore wings, but across the fascia are two dark brown bars ; the outer margin is faintly shaded with brown ; abdominal margin light brown ; fringes dark brown.

Under side : palpi and thorax are gray ; abdomen light brown. On both pairs of wings the ground colour is pale brown ; the markings are the same as above. Expanse, $1\frac{3}{4}$ inches. Hab.: Suapure, Venezuela. Type in collection of Ehrmann.